A1 / STUDY 2 - SUBJECT INFORMATION LETTER

Dear Participant,

Last year (between mid-August and mid-October) you participated in a research project that was conducted at the Milford Proving Grounds in Milford, Michigan. That project examined driver's braking maneuvers, and is one of a continuing program of research being conducted by Ford and GM. The purpose of this research program is to understand how to properly design a feature for cars which could reduce the frequency and severity of rear-end accidents. Such a feature would have the potential to greatly improve traffic safety. In the United States, rear-end accidents account for about 25% of all accidents and 5% of all fatal accidents. The previous study in which you participated was aimed at understanding driver's braking judgments without a crash avoidance feature. The data from this study provided us with an essential building block for understanding how to design a crash avoidance feature for rear-end accidents.

The current project is a follow-up to this earlier project, and is similar in many respects. As a test participant, you will again be driving a real car at speeds ranging from 30-60 mph. The object you will be driving behind is an "artificial" rear-end of a vehicle identical to the "artificial car" you previously experienced. This "artificial car" will be towed about 40 feet (or one and one half car lengths) behind a real car. You will be asked to brake in response to rear-end crash alerts in order to avoid colliding with the artificial car. We will be testing several different types of crash alerts.

The passenger in the car you will be driving will again be a trained General Motors Milford Proving Ground test driver. As before, the test driver will have access to passenger-side brakes and will override your braking to avoid collisions with the artificial car. If you do collide with the lead vehicle, you should know that the artificial car is constructed of a material such that, if struck, it is designed not to cause injury to either the test participant or researchers. Furthermore, the artificial car and towing vehicle are connected with a beam, which is designed to collapse and absorb the collision impact if the artificial car is struck. During this study you will be asked to complete a questionnaire about your experience. At no time will you be asked to perform any unsafe driving actions.

You must have a valid, unrestricted, U.S. drivers license (except for corrective eye glasses), have a minimum of two years driving experience, be 20 years of age or older, have normal hearing and vision (with correction allowed), be able to drive an automatic transmission vehicle without assistive devices or special equipment, be able to give informed consent, and not be under the influence of alcohol, drugs, or any other substances (e.g., antihistamines) which may impair your ability to drive.

In addition you must not have a history of heart condition or prior heart attack, lingering effects of brain damage from stroke, tumor, head injury, or infection, epileptic seizures in the past 12 months, shortness of breath or chronic medical therapy for respiratory disorders, a history of motion sickness, a history of inner ear problems, dizziness, vertigo, or balance problems, diabetes for which insulin is required, chronic migraine or tension headaches, or be pregnant.

You must not have used alcohol, drugs, or any other substances (e.g., antihistamines) which will impair your ability to drive for a period of no less than 24 hours prior to participation.

Risks: There are some risks and discomforts to which you expose yourself in volunteering for this research. This includes the risk of an accident normally associated with driving and braking a vehicle in response to a stopped or slowing lead vehicle. Unlike in normal driving, this stopped or slowing lead vehicle will be an artificial vehicle attached to a collapsible beam, and your passenger will be a trained General Motors Milford Proving Ground test driver. This test driver will have access to passenger-side brakes and will override your braking in order to avoid collisions with the artificial car. If an accident does occur, the experimenters will arrange medical transportation to the Milford Proving Ground Medical facility. You will be required to undergo examination by medical personnel there. You will be responsible for making arrangements for payment of subsequent treatment.

Benefits: There are no direct benefits to you from this research other than compensation for your time and effort. However, by participating in this study, you are lending your experience as a driver to research aimed at understanding how to properly design a feature for cars which could reduce the frequency and severity of rear-end accidents. You will not be informed as to the results of this study.

Payment: You will be paid \$150 for participation in this study. The study will take about 2-2 ½ hours. Payment will be made by check at the time of participation.

Withdrawal: Participation in this study is voluntary. You may withdraw at anytime, for any reason, without penalty. Should you withdraw, you will still be paid in full.

Confidentiality: The data gathered in this study will be treated with anonymity. Shortly after you have participated, your name will be separated from your data and it will be given a number. Only the Principle Investigator will have access to this coding information. Your name will not appear in any reports or papers written about the project. Any videotapes of the data, which will include video of the your head and face, will be kept until they are no longer needed. Confidentiality of this video information will be protected.

The researchers hope that you will agree to participate in this study. If you have any questions, please feel free at any time to ask the experimenter.

Once you have had your questions answered, please let the experimenter know whether you are interested in participating in this study. If you are willing to participate, the experimenter will ask you some questions to ensure that your background and experience match our research needs. If it is determined that you qualify to participate, you will be asked to read and sign an Informed Consent Form before you can actually participate in the study.

A2 / STUDY 2 - INFORMED CONSENT STATEMENT

I, _	, agree to participate in research aimed at understanding
hov	w to properly design a feature for cars which could reduce the frequency and severity of rear-
enc	d accidents.

You are being asked to volunteer to be a subject in a research project whose purpose and 1. description are contained in the Information Letter. The purpose of this research program is to understand how to properly design a feature for cars which could reduce the frequency and severity of rear-end accidents. As a test participant, you will drive a real car at speeds ranging from 30-60 mph. The object you will be driving behind is an "artificial" rear-end of a vehicle. This "artificial car" will be towed about 40 feet (or one and one half car lengths) behind a real car. You will be asked to brake in response to rear-end crash alerts in order to avoid colliding with the artificial car. The passenger in the car you will be driving will be a trained General Motors Milford Proving Ground test driver. The test driver will have access to passenger-side brakes and will override your braking judgments to avoid collisions with the artificial car. If you do collide with the lead vehicle, you should know that the artificial car is constructed of a material such that, if struck, it is designed not to cause injury to either the test participant or researchers. Furthermore, the artificial car and towing vehicle are connected with a beam, which is designed to collapse and absorb the collision impact if the artificial car is struck. During the test you will be asked to complete a questionnaire about your experience. At no time will you be asked to perform any unsafe driving actions.

There are some risks and discomforts to which you expose yourself in volunteering for this research. These include the risk of an accident normally associated with driving and braking a vehicle in response to a stopped or slowing lead vehicle. Unlike in normal driving, this stopped or slowing lead vehicle will be an artificial vehicle attached to a collapsible beam (as described above), and your passenger will be a trained General Motors Milford Proving Ground test driver. This test driver will have access to passenger-side brakes and will override your braking in order to avoid collisions with the artificial car.

3. The following precautions will be taken during your drive:

The experimenter will always be present in the test vehicle and will monitor your driving. They will ask you to discontinue participation if they feel the risks are too great to continue. However, as long as you are driving the research vehicle, it remains your responsibility to drive in a safe, legal manner.

The front seat experimenter will have an override brake pedal.

The vehicle is equipped with a driver-side airbag and anti-lock brakes. Air bags inflate with great force, faster than the blink of an eye. If you're too close to an inflating air bag, it could seriously injure you. Safety belts help you keep in position before and during a crash. You should always wear your safety belt, even with air bags. You will be required to wear your lap

and shoulder belt system during this test anytime the car is moving. You should sit as far back as possible while still maintaining control of the vehicle.

The vehicle is equipped with a fire extinguisher and first-aid kit. The lead vehicle has a cellular phone.

If an accident does occur, the experimenters will arrange medical transportation to the Milford Proving Ground Medical facility. You will be required to undergo examination by medical personnel in the emergency room. You will be responsible for making arrangements for payment of the expenses of such treatment.

Trained medical personnel will be immediately accessible by phone at all times during testing.

4. The data gathered in this study will be treated with anonymity. Shortly after you have participated, your name will be separated from your data and it will be given a number. Only the Principle Investigator will have access to this coding information. Your name will not appear in any reports or papers written about the project. Any videotapes of the data, which will include video of your head and face, will be kept until they are no longer needed. Confidentiality of this video information will be protected.

It is possible that, should you be involved in an accident during testing, that the researchers will have to release your data on your driving in response to a court order.

- 5. You will be paid \$150 for participation in this study. The study will take about $2-2\frac{1}{2}$ hours. Payment will be made by check at the time of participation.
- 6. There are no direct benefits to you from this research other than payment. However, by participating in this study, you are lending your experience as a driver to research aimed at understanding how to properly design a feature for cars which could reduce the frequency and severity of rear-end accidents. You will not be informed as to the results of this study.
- 7. By agreeing to participate, you certify that you possess a valid, unrestricted, U.S. drivers license (except for corrective eye glasses), have a minimum of 2 years driving experience, be 20 years of age or older, have normal hearing and vision (with correction allowed), are able to drive an automatic transmission vehicle without assistive devices or special equipment, are able to give informed consent and are not under the influence of alcohol, drugs, or any other substances (e.g., antihistamines) which may impair your ability to drive. You also certify that you do not have a history of heart condition or prior heart attack, lingering effects of brain damage from stroke, tumor, head injury, or infection, epileptic seizures in the past 12 months, shortness of breath or chronic medical therapy for respiratory disorders, a history of motion sickness, a history of inner ear problems, dizziness, vertigo, or balance problems, diabetes for which insulin is required, chronic migraine or tension headaches, or are pregnant. Additionally, you have not used alcohol, drugs, or any other substances (e.g., antihistamines) which will impair your ability to drive for a period of no less than 24 hours prior to participation.
- 8. The experimenters will answer any question that you might have about this project and you should not sign this informed consent form until you are satisfied that you understand all of

the previous descriptions and conditions. You may contact the principal investigator at the following address and telephone number:

Raymond J. Kiefer, Ph.D.
CAMP
Discovery Centre
39255 Country Club Drive
Suite B-30
Farmington Hills, MI 48331
(248) 848-9595 ext. 15

Participant:

- 9. If information becomes available which might reasonably be expected to affect your willingness to continue participating in this study, this information will be provided to me.
- 10. Participation in this study is voluntary. You may withdraw from this study at any time, and for any reason, without penalty. Should you withdraw, you will still be paid in full.
- 11. By signing this form you certify, to the best of your knowledge, you have no physical ailments or conditions which could either be further aggravated or adversely affected by participation in this study.

I have read and understand the scope of this research program and I have no other questions at this time. I understand that I am free to ask questions at any time. I hereby give my consent to participate, but I understand that I may stop at anytime, if I choose to do so.

1 articipant.		
Name:		
Address:		
Telephone:		
Signature:	Date:	
Researcher:		
Signature:	Date:	

A3 / STUDY 2 - TEST INSTRUCTIONS

The purpose of this study is to understand both when and how to present crash warning information to drivers. All of the testing will be conducted on a test track, which is closed to all other traffic during testing. The study is being conducted jointly by General Motors and Ford.

During the test, you will asked to drive a Ford Taurus, which has been equipped with various devices designed to measure your driving performance. Once you get into the vehicle, you will be given some time to become familiar with it. The passengers in the car with you while you're driving will be a trained General Motors Milford Proving Ground test driver and also myself. Both the test driver and myself will be giving you further instructions throughout the test.

Throughout the test, you will be experiencing crash alerts while approaching a stationary artificial car. You will be asked to approach the artificial car at either 30 or 60 mph. Please accelerate in a comfortable, quick manner to reach the speed instructed.

Your task is to keep your foot on the accelerator and maintain a steady speed until the crash alert occurs. When the crash alert occurs, you should brake immediately by quickly moving your foot from the accelerator to the brake. Please brake the car to a complete stop such that you do not collide with the artificial car. Please brake the car in any way you are comfortable and that you feel is appropriate to avoid colliding with the artificial car. Once again, it is extremely important that you keep your foot on the accelerator and maintain a steady speed until the crash alert occurs.

Because you will be expecting the crash alert to occur, your RT to the crash alert will be faster than what it would be under normal driving conditions. Because of these faster RTs, we have shortened the warning distances so that you can experience when you might begin braking if your vehicle had a crash alert system (show illustration). Each time you complete a braking event, I will ask you two questions about the alert. One question is about the timing of the alert and the other is about the urgency level of the alert. When answering both of these questions, please rate the timing and urgency level of the alert based on your own experience during the test as a highly alert driver that is expecting the alert to occur. Please keep in mind that you will be experiencing when you might begin braking if your vehicle had a crash alert system (show illustration).

The test driver in the car with you will have access to passenger-side brakes. When necessary, the test driver will override your braking to avoid collisions with the artificial car. But if that should happen, please do not become concerned or frustrated, just do the best you can. If you do collide with the artificial car, you should know that it is constructed of a "soft" material such that, if struck, it is designed not to cause injury to either you or the test drivers. At no time will you be asked to perform any unsafe driving actions.

After the test is completed, you will be returned here. You will then be given a chance to refresh, and receive further explanation about the study. You will then be paid \$150 by check and dismissed. Your total participation time will be 2-2 ½ hours.

If you now have any questions about the test, please do not he sitate to ask.

A4 / STUDY 2 - ALERT MODALITY APPROPRIATENESS QUESTIONNAIRE (EXCERPTS)

Assume that the crash alerts you just experienced are going to be implemented in a vehicle. Use the rating scale below to respond to each question about the warning. Mark the number from the scale that corresponds to your response in the space provided at the beginning of each question.



USED FOR BOTH HHDD AND HUD VISUAL ALERTS How would you rate the <u>intensity</u> or brightness of this display? How would you rate the size of this display? How would you rate the color of this display? How would your rate the <u>location</u> of this display? USED FOR BOTH SPEECH AND NON-SPEECH AUDITORY ALERTS How would you rate the loudness of this warning? 2 3 4 5 6 Extremely Moderately Slightly Just Slightly Moderately Extremely Soft Soft Soft Right Loud Loud Loud How would you rate the <u>duration</u> or length of this warning? 2 3 4 5 6 Extremely Moderately Slightly Slightly Moderately Extremely Just Right Short Short Short Long Long Long USED FOR THE BRAKE PULSE ALERT How would you rate the strength of the vehicle jerk that occurred during this warning? 2 3 4 5 6 Slightly Moderately Extremely Extremely Moderately Just Slightly Weak Weak Weak Right Strong Strong Strong How would you rate the duration or length of this warning?

4

Just

Right

5

Slightly

Long

6

Long

Moderately

Extremely

Long

2

Short

Moderately

Extremely

Short

3

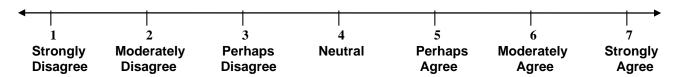
Short

Slightly

A5 / STUDY 2 – CRASH ALERT APPROPRIATENESS QUESTIONNAIRE

Please indicate the extent to which you agree with the following statements for each method of presenting crash alert information you experienced in the study. Please consider both the conditions when you expected the alert and when the alert was a surprise event.

Use the numbering on the scale below to make your responses. Place your response in the appropriate column below.



	Head-Up Display & Tone	High Head Down & Tone	High Head Down & Speech	High Head Down & Pulse
This is a good method for presenting crash alerts to drivers.				
2. This method would be clearly noticeable in the car.				
3. This method would NOT be confused with other events happening either inside or outside the car.				
4. This method would get my attention immediately if I was distracted and not concentrating on the driving task.				
5. This method would NOT startle me, that is, cause me to blink, jump, or make a rapid reflex-like movement.				
6. This method would NOT interfere with my ability to make a quick and accurate decision about the safest driving action to				
7. This method would NOT interfere with my ability to perform a quick an accurate emergency driving action.				
8. This method would NOT annoy me if the alert came on once a week in a situation where no driving action was required.				
9. This method would NOT annoy me if the alert came on once a day in a situation where no driving action was required.				
10. This method would NOT appear out of place in a car or truck.				
11. This method would clearly tell me that I am in danger and need to react immediately.				
12. This method of presenting crash alert information has great potential for preventing me from getting in a rear-end accident.				
13. This method of presenting crash alert information would get my attention without being overly annoying.				
14. If cost was not an issue, I would be likely to purchase this type of crash alert feature when I purchased a vehicle.				

A6 / STUDY 2 - BUILD AN INTERFACE QUESTIONNAIRE

In this study, you were instructed to pay attention to the alerts. However, in normal driving situations, the crash alert would probably occur when drivers are not concentrating on the driving task.

If you could design your own crash alert system, which <u>alert or combination of alerts</u> used in this study do you think would be most effective for getting your attention and prompting you to respond appropriately in dangerous driving situations?				
Below is a list of the different types of crash alerts you experienced. Please check the crash alert(s) you would use to design your own system.				
☐ Head-Up Display (symbol projected onto windshield)	☐ Tone Warning			
☐ High Head-Down	☐ Speech Warning			
(symbol illuminated on dashboard display)	☐ Brake Pulse			
Now instead of the single alerts you experienced today, assume that the alert had two stages a cautionary stage and an imminent stage. The first-stage cautionary alert would probably come on just about a second earlier than the one-stage alert. Then, if the driver does not correct the dangerous situation, the cautionary alert would transition into the second-stage imminent alert.				
The difference between one- and two-stage alerts is that a more aggressive driving maneuver will probably be required when a one-stage alert comes on than when a cautionary alert of the two-stage alert comes on. However, if the second-stage imminent alert comes on, a very aggressive driving maneuver will probably be required. In addition, because a cautionary alert is more conservative in its timing, the alert will probably come on more often possibly making it annoying to some drivers.				
We would like your help designing a two-stage crash alert system. Please check the crash alert(s) below that you think would be most effective as a first-stage cautionary alert and a second-stage imminent alert. You can choose any combination of alerts for either stage that you wish, however, the first and second stages need to be distinguishable.				
CAUTIONARY ALERT (First stage)	IMMINENT ALERT (Second stage)			
☐ Head-Up Display ☐ Tone Warning	☐ Head-Up Display ☐ Tone Warning			
☐ High Head-Down ☐ Speech Warning	☐ High Head-Down ☐ Speech Warning ☐ Produce Produce			
☐ Brake Pulse	☐ Brake Pulse			

A7 / STUDY 2 - NAME THE SYSTEM QUESTIONNAIRE

Now that you have some idea about what a warning system would be like, we would your opinion about what to name it. The name should clearly identify the system for users.

The proposed system would function very much like the system you experienced in the study. That is, when a driver approaches a slower or stopped vehicle, the system would alert the driver to the dangerous situation.

What do you think would be a good name for this system?				
The following was shown on the following page of the questionnaire)				
isted below are other names that have been proposed for the new warning system. Ple hoose three names that you think would be good choices.	ease			
Number your choices 1 (best), 2 (second best), and 3 (third best).				
Forward Collision Warning System				
Forward Crash Warning System				
Forward Accident Warning System				
Rear-end Collision Warning System				
Rear-end Crash Warning System				
Rear-end Accident Warning System				
Front-end Collision Warning System				
Front-end Crash Warning System				
Front-end Accident Warning System				

A8 / STUDY 3 - SUBJECT INFORMATION LETTER

Dear Participant,

You are being asked to participate in research which will examine the distance a driver normally follows the vehicle ahead under a variety of situations. The data from this study will provide us with an essential building block for understanding how to design a feature for cars that would automatically adjust the distance between your vehicle and the vehicle ahead. This feature can be thought of as an enhancement to the cruise control feature, which is offered to enhance driver's comfort in many current vehicles.

As a test participant, you will drive a real car at speeds ranging from 30-60 mph. As a safety precaution, the object you will be driving behind is an "artificial" rear-end of a vehicle. This "artificial car" will be towed about 40 feet (or one and one half car lengths) behind a real car. You will be asked to simply follow this artificial car at your normal following distance under a variety of conditions. The passenger in the car you will be driving will be a trained General Motors Milford Proving Ground test driver. The test driver will have access to passenger-side brakes and will override your braking in the event it becomes necessary. If you do collide with the lead vehicle, you should know that the artificial car is constructed of a material such that, if struck, it is designed not to cause injury to either the test participant or researchers. During the testing you will be asked to complete a questionnaire about your experience. At no time will you be asked to perform any unsafe driving actions.

You must have a valid, unrestricted, U.S. drivers license (except for corrective eye glasses), have a minimum of 2 years driving experience, be 20 years of age or older, have normal hearing and vision (with correction allowed), be able to drive an automatic transmission vehicle without assistive devices or special equipment, be able to give informed consent, and not be under the influence of alcohol, drugs, or any other substances (e.g., antihistamines) which may impair your ability to drive.

In addition you must not have a history of heart condition or prior heart attack, lingering effects of brain damage from stroke, tumor, head injury, or infection, epileptic seizures in the past 12 months, shortness of breath or chronic medical therapy for respiratory disorders, a history of motion sickness, a history of inner ear problems, dizziness, vertigo, or balance problems, diabetes for which insulin is required, chronic migraine or tension headaches, or be pregnant. You must not have used alcohol, drugs, or any other substances (e.g., antihistamines) which will impair your ability to drive for a period of no less than 24 hours prior to participation.

Risks: There are some risks and discomforts to which you expose yourself in volunteering for this research. This includes the risk of an accident normally associated with driving and braking a vehicle in response to a stopped or slowing lead vehicle. Unlike in normal driving, this stopped or slowing lead vehicle will be an artificial vehicle attached to a collapsible beam, and your passenger will be a trained General Motors Milford Proving Ground test driver. This test driver will have access to passenger-side brakes and will override your braking in order to avoid collisions with the artificial car. If an accident does occur, the experimenters will arrange medical transportation to the Milford Proving Ground Medical facility. You will be required to undergo examination by medical personnel there. You will be responsible for making arrangements for payment of subsequent treatment.

Benefits: There are no direct benefits to you from this research other than compensation for your time and effort. However, by participating in this study, you are lending your experience as a driver to research aimed at understanding how to properly design a feature for cars which would automatically adjust the distance between a driver's vehicle and the vehicle ahead. You will not be informed as to the results of this study.

Payment: You will be paid \$150 for participation in this study. The study will take about 2-2 ½ hours. Payment will be made by check at the time of participation.

Withdrawal: Participation in this study is voluntary. You may withdraw at anytime, for any reason, without penalty. Should you withdraw, you will still be paid in full.

Confidentiality: The data gathered in this study will be treated with anonymity. Shortly after you have participated, your name will be separated from your data and it will be given a number. Only the Principle Investigator will have access to this coding information. Your name will not appear in any reports or papers written about the project. Any videotapes of the data, which will include video of the your head and face, will be kept until they are no longer needed. Confidentiality of this video information will be protected.

The researchers hope that you will agree to participate in this study. If you have any questions, please feel free at any time to ask the experimenter.

Once you have had your questions answered, please let the experimenter know whether you are interested in participating in this study. If you are willing to participate, the experimenter will ask you some questions to ensure that your background and experience match our research needs. If it is determined that you qualify to participate, you will be asked to read and sign an Informed Consent Form before you can actually participate in the study.

A9 / STUDY 3 - INFORMED CONSENT

I,	, agree to participate in research aimed at understanding
how to properly design a feature	for cars which would automatically adjust the distance between
a driver's vehicle and the vehicle	e ahead.

1. You are being asked to volunteer to be a subject in a research project whose purpose and description are contained in the Information Letter. The purpose of this research program is to understand how to properly design a feature for cars that would automatically adjust the distance between a driver's vehicle and the vehicle ahead. As a test participant, you will drive a real car at speeds ranging from 30-60 mph. As a safety precaution, the object you will be driving behind is an "artificial" rear-end of a vehicle. This "artificial car" will be towed about 40 feet (or one and one half car lengths) behind a real car. You will be asked to simply follow this artificial car at your normal following distance under a variety of conditions. The passenger in the car you will be driving will be a trained General Motors Milford Proving Ground test driver. The test driver will have access to passenger-side brakes and will override your braking in the event it becomes necessary. If you do collide with the lead vehicle, you should know that the artificial car is constructed of a material such that, if struck, it is designed not to cause injury to either the test participant or researchers. During this testing, you will be asked to complete a questionnaire about your experience. At no time will you be asked to perform any unsafe driving actions.

There are some risks and discomforts to which you expose yourself in volunteering for this research. These include the risk of an accident normally associated with driving and braking a vehicle in response to a stopped or slowing lead vehicle. Unlike in normal driving, this stopped or slowing lead vehicle will be an artificial vehicle attached to a collapsible beam, and your passenger will be a trained General Motors Milford Proving Ground test driver. This test driver will have access to passenger-side brakes and will override your braking in order to avoid collisions with the artificial car.

3. The following precautions will be taken during your drive:

The experimenter will always be present in the test vehicle and will monitor your driving. They will ask you to discontinue participation if they feel the risks are too great to continue. However, as long as you are driving the research vehicle, it remains your responsibility to drive in a safe, legal manner.

The front seat experimenter will have an override brake pedal.

The vehicle is equipped with a driver-side airbag and anti-lock brakes. Air bags inflate with great force, faster than the blink of an eye. If you're too close to an inflating air bag, it could seriously injure you. Safety belts help you keep in position before and during a crash. You should always wear your safety belt, even with air bags. You will be required to wear your lap and shoulder belt system during this test anytime the car is moving. You should sit as far back as possible while still maintaining control of the vehicle.

The vehicle is equipped with a fire extinguisher and first aid kit. The lead vehicle has a cellular phone.

If an accident does occur, the experimenters will arrange medical transportation to the Milford Proving Ground Medical facility. You will be required to undergo examination by medical personnel in the emergency room. You will be responsible for making arrangements for payment of the expenses of such treatment.

Trained medical personnel will be immediately accessible by phone at all times during testing.

- 4. The data gathered in this study will be treated with anonymity. Shortly after you have participated, your name will be separated from your data and it will be given a number. Only the Principle Investigator will have access to this coding information. Your name will not appear in any reports or papers written about the project. Any videotapes of the data, which will include video of your head and face, will be kept until they are no longer needed. Confidentiality of this video information will be protected. It is possible that, should you be involved in an accident during testing, that the researchers will have to release your data on your driving in response to a court order.
- 5. You will be paid \$150 for participation in this study. The study will take about 2-2 ½ hours. Payment will be made by check at the time of participation.
- 6. There are no direct benefits to you from this research other than payment. However, by participating in this study, you are lending your experience as a driver to research aimed at understanding how to properly design a feature for cars which would automatically adjust the distance between a driver's vehicle and the vehicle ahead. You will not be informed as to the results of this study.
- 7. By agreeing to participate, you certify that you possess a valid, unrestricted, U.S. drivers license (except for corrective eye glasses), have a minimum of 2 years driving experience, be 20 years of age or older, have normal hearing and vision (with correction allowed), are able to drive an automatic transmission vehicle without assistive devices or special equipment, are able to give informed consent and are not under the influence of alcohol, drugs, or any other substances (e.g., antihistamines) which may impair your ability to drive. You also certify that you do not have a history of heart condition or prior heart attack, lingering effects of brain damage from stroke, tumor, head injury, or infection, epileptic seizures in the past 12 months, shortness of breath or chronic medical therapy for respiratory disorders, a history of motion sickness, a history of inner ear problems, dizziness, vertigo, or balance problems, diabetes for which insulin is required, chronic migraine or tension headaches, or are pregnant. Additionally, you have not used alcohol, drugs, or any other substances (e.g., antihistamines) which will impair your ability to drive for a period of no less than 24 hours prior to participation.
- 8. The experimenters will answer any question that you might have about this project and you should not sign this informed consent form until you are satisfied that you understand all of the previous descriptions and conditions. You may contact the principal investigator at the following address and telephone number:

Raymond J. Kiefer, Ph.D. CAMP Discovery Centre 39255 Country Club Drive Suite B-30 Farmington Hills, MI 48331 (248) 848-9595 ext. 15

- 9. If information becomes available which might reasonably be expected to affect your willingness to continue participating in this study, this information will be provided to me.
- 10. Participation in this study is voluntary. You may withdraw from this study at any time, and for any reason, without penalty. Should you withdraw, you will still be paid in full.
- 11. By signing this form you certify, to the best of your knowledge, you have no physical ailments or conditions which could either be further aggravated or adversely affected by participation in this study.

I have read and understand the scope of this research program and I have no other questions at this time. I understand that I am free to ask questions at any time. I hereby give my consent to participate, but I understand that I may stop at anytime, if I choose to do so.

Participant:		
Name:		
Address:		
Telephone:		
Signature:	Date:	
Researcher:		
Signature:	Date:	